

CLAIMS

1. A composition which comprises component (1) and at least one of components (2), (3) and (4), namely:
(1) a completely water-soluble antioxidant containing sodium rosmarinate which is an extract of plant tissue of the *Labiatae* family;
(2) at least one ingredient selected from ascorbic acid, isoascorbic acid and their non-toxic water-soluble salts;
(3) at least one ingredient selected from citric acid and its non-toxic salts, and non-toxic water soluble salts of acetic and lactic acids;
(4) at least one ingredient selected from non-toxic salts of propionic acid;
provided that when component (2) is present, the weight ratio of sodium rosmarinate to component (2) is within the range of about 1:1.5 to about 1:90.
2. A composition according to claim 1, wherein component (2) is present, and said weight ratio range is about 1:3 to about 1:50.
3. A composition according to claim 1, which is in the solid state.
4. A composition according to claim 1, which is an aqueous solution comprising components (1) and (2).
5. A composition according to claim 1, which is an emulsion comprising components (1) and (2), together with water and at least one non-toxic oil and at least one non-toxic emulsifying agent.
6. A composition according to claim 1, which is an aqueous solution comprising components (1) and (3).
7. A composition according to claim 1, which is an admixture comprising components (1) and (4).

8. A method for enhancing the antioxidative protection afforded to a meat product by at least one substance selected from ascorbic acid, isoascorbic acid and their non-toxic water-soluble salts, inhibiting the formation of undesired toxic substances, and stabilization of myoglobin in said product, which comprises treating the meat product with an effective amount of the aqueous solution comprising components (1) and (2), as defined in claim 4.

9. A method according to claim 8, wherein component (2) is selected from ascorbic acid and its non-toxic salts, and the concentrations in said solution of components (1) and (2) is such that the meat product after treatment contains 20-40 ppm sodium rosmarinate and 150-750 ppm component (2).

10. A method for enhancing the antioxidative protection afforded by at least one substance selected from ascorbic acid, isoascorbic acid and their non-toxic water-soluble salts, while inhibiting the formation of undesired toxic substances, in an edible oil or fat, or in a foodstuff which comprises an edible oil or fat, which comprises treating said oil, fat or foodstuff with an effective amount of the emulsion comprising components (1) and (2), as defined in claim 5.

11. A method according to claim 10, wherein the weight ratio of sodium rosmarinate to component (2) in the emulsion is within the range of about 1:5 to about 1:15.

12. A method for enhancing inhibition of microbial deterioration provided by at least one ingredient selected from citric acid and its non-toxic salts, and non-toxic water soluble salts of acetic and lactic acids, citric acid and non-toxic salts of propionic acid, in items selected from meat products, flour and bakery products, and other foodstuffs, while simultaneously providing antioxidative protection therefore, which comprises treating the items with an effective amount of the aqueous solution comprising components (1) and (3) as defined in claim 6, or the admixture comprising components (1) and (4) as defined in claim 7.

13. A method according to claim 12, wherein the weight ratio of component (1) to component (3) or (4), is in the range is about 1:100 to about 1:500.

14. A member of the group consisting of edible oils and fats, fatty and non-fatty meat products and plant proteins, and foodstuffs other than meat comprising an edible oil or fat, which incorporates:

a completely water-soluble antioxidant containing sodium rosmarinate which is an extract of plant tissue of the *Labiatae* family; and

at least one ingredient selected from ascorbic acid, isoascorbic acid and their non-toxic water-soluble salts;

provided that the weight ratio of sodium rosmarinate to said at least one ingredient is within the range of about 1:1.5 to about 1:90.

15. A member of the group consisting of meat products, bakery products and other foodstuffs, which incorporates:

a completely water-soluble antioxidant containing sodium rosmarinate which is an extract of plant tissue of the *Labiatae* family; and

at least one ingredient selected from citric acid and its non-toxic salts, non-toxic water soluble salts of acetic and lactic acids, and non-toxic salts of propionic acid.

16. A method for enhancement of the preservative activity in a foodstuff of a known additive selected from the group consisting of carboxylic acids and non-toxic salts thereof, which comprises adding to the foodstuff, in addition to said known additive, a completely water-soluble antioxidant extract of plant tissue of the *Labiatae* family containing sodium rosmarinate, in an amount which is effective for the purpose of said enhancement.

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original claim 1, amended; original claims 2 - 16, remain unchanged]

1. A composition which comprises component (1) and at least one of components (2), (3) and (4), namely: (1) a completely water-soluble antioxidant containing sodium rosmarinate which is an extract of plant tissue of the *Labiatae* family; (2) at least one ingredient selected from ascorbic acid, isoascorbic acid and their non-toxic water-soluble salts; (3) at least one ingredient selected from citric acid and its non-toxic salts, and non-toxic water soluble salts of acetic and lactic acids; (4) at least one ingredient selected from non-toxic salts of propionic acid; provided that when component (2) is present, then sodium rosmarinate is present in said composition in an amount effective to enhance the antioxidative protection afforded by component (2) while inhibiting the formation of undesired toxic substances, in an edible oil or fat, or in a foodstuff which comprises an edible oil or fat, or in a meat product, and the weight ratio of sodium rosmarinate to component (2) is within the range of about 1:1.5 to about 1:90; and when component (3) and/or component (4) is present, then sodium rosmarinate is present in said composition in an amount effective to enhance inhibition of microbial deterioration provided by component (3) and/or component (4) in items selected from meat products, flour and bakery products, and other foodstuffs, and the weight ratio of component (1) to component (3) or (4) independently, is in the range is about 1:100 to about 1:500.
2. A composition according to claim 1, wherein component (2) is present, and said weight ratio range is about 1:3 to about 1:50.
3. A composition according to claim 1, which is in the solid state.
4. A composition according to claim 1, which is an aqueous solution comprising components (1) and (2).
5. A composition according to claim 1, which is an emulsion comprising components (1) and (2), together with water and at least one non-toxic oil and at least one non-toxic emulsifying agent.
6. A composition according to claim 1, which is an aqueous solution comprising components (1) and (3).
7. A composition according to claim 1, which is an admixture comprising components (1) and (4).